STATE OF CALIFORNIA ARNOLD SCHWARZENEGGER, *Governor*

PUBLIC UTILITIES COMMISSION
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SAN FRANCISCO, CA 94102-3298

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TO PARTIES OF RECORD IN RULEMAKING 06-03-004

This is the proposed decision of President Peevey. It will not appear on the Commission's agenda for at least 30 days after the date it is mailed. The Commission may act then, or it may postpone action until later.

When the Commission acts on the proposed decision, it may adopt all or part of it as written, amend or modify it, or set it aside and prepare its own decision. Only when the Commission acts does the decision become binding on the parties.

Parties to the proceeding may file comments on the proposed decision as provided in Article 14 of the Commission's Rules of Practice and Procedure (Rules), accessible on the Commission's website at www.cpuc.ca.gov. Pursuant to Rule 14.3, opening comments shall not exceed 15 pages.

Comments must be filed either electronically pursuant to Resolution ALJ-188 or with the Commission's Docket Office. Comments should be served on parties to this proceeding in accordance with Rules 1.9 and 1.10. Electronic copies of comments should be sent to Administrative Law Judge (ALJ) Duda at dot@cpuc.ca.gov. All parties must serve hard copies on the ALJ and the Assigned Commissioner, and for that purpose I suggest hand delivery, overnight mail, or other expeditious method of service. The current service list for this proceeding is available on the Commission's website at www.cpuc.ca.gov.

/s/ ANGELA K. MINKIN
Angela K. Minkin, Chief
Administrative Law Judge

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Attachment

Decision **PROPOSED DECISION OF PRESIDENT PEEVEY**
(Mailed 11/14/2006)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Policies, Procedures and Rules for the California Solar Initiative, the Self-Generation Incentive Program and Other Distributed Generation Issues.	Rulemaking 06-03-004 (Filed March 2, 2006)

OPINION MODIFYING DECISION 06-01-024 AND DECISION 06-08-028 IN RESPONSE TO SENATE BILL 1

I. Summary

This decision modifies Decision (D.) 06-01-024 and D.06-08-028 to conform the California Solar Initiative (CSI) to recent legislation. Specifically, this decision addresses the requirements of Senate Bill 1 (SB 1) and modifies the Commission's earlier CSI decisions to clarify the maximum project size that can receive incentives, to phase in performance-based incentives more quickly, and to establish time-of-use tariff and interim energy efficiency requirements. In addition, the Commission modifies earlier CSI decisions to clarify that it will no longer collect revenues from natural gas ratepayers to fund CSI. The Commission's CSI budget allocations and megawatt (MW) goals are also modified in this decision to match the CSI budget specified in SB 1. Finally, this decision specifies that solar technologies other than photovoltaic (PV) may receive incentives through CSI, but only if they displace electric usage.

II. Background

In D.06-01-024, the Commission (or CPUC) established the CSI, with a total budget of $2.5 billion from 2007 through 2016 for the Commission portion of the program, to be funded through ratepayer support.[1] In D.06-08-028, the Commission established further implementation details for CSI, notably the adoption of performance-based incentives, and refinements to the schedule for incentive reductions.

On August 21, 2006, the Governor signed SB 1, which directs the Commission and the CEC to implement the CSI given specific requirements and budget limits set forth in the legislation.[2] For example, SB 1 directs the CEC to establish eligibility criteria for solar energy systems receiving ratepayer funded incentives and it requires the CPUC to adopt a performance-based incentive program by January 1, 2008. SB 1 mandates that the CPUC portion of CSI shall not exceed a total program cost of $2.16 billion.

In light of SB 1, certain program and budgetary details set forth in D.06-01-024 and D.06-08-028 require modification. On September 15, 2006, the assigned Administrative Law Judge (ALJ) issued a ruling highlighting specific language in SB 1 and proposing a possible course of action for the Commission's CSI program in light of that language. In addition to specific modifications of prior Commission orders, the ruling noted that the Commission's total MW goal

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[1] The California Energy Commission (CEC) collaborated with the Commission on the creation of CSI in D.06-01-024. In D.06-01-024, the CEC portion of CSI entailed $350 million in funding through the Public Goods Charge on investor-owned utility ratepayers.

[2] SB 1 goes into effect on January 1, 2007.

and budget were now reduced by SB 1 because statewide program dollars and MW goals include the participation of municipal utilities. Thus, the ruling contained revised tables to adjust utility budgets and MW goals to match the new budget limits in SB 1.

On September 25 and October 2, 2006, parties filed comments and reply comments on the proposals contained in the ALJ's ruling.[3] In the sections below, the topics raised in SB 1 that require a modification of a prior Commission order are discussed.

III. One MW Size Limit

SB 1 adds Section 2851(a)(1) to the Public Utilities Code[4] and states that:

> The commission shall authorize the award of monetary incentives for up to the first megawatt of alternating current generated by solar energy systems that meet the eligibility criteria established by the State Energy Resources Conservation and Development Commission pursuant to Chapter 8.8 (commencing with Section 25780) of Division 15 of the Public Resources Code.

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[3] Comments and/or reply comments were filed by Americans for Solar Power (ASPv), Californians for Renewable Energy, Inc. (CARE), City and County of San Francisco (CCSF), Consumer Federation of California (CFC), the Joint Solar Parties (a consortium of PV Now, the California Solar Energy Industries Association, and the Vote Solar Initiative), Pacific Gas and Electric Company (PG&E), jointly by San Diego Gas & Electric Company and Southern California Gas Company (SDG&E/SoCalGas), San Diego Regional Energy Office (SDREO), Southern California Edison Company (SCE), and the Southern California Generation Coalition (Coalition).

[4] Code sections modified or added by SB 1 will not appear in the statutes until their effective date of January 1, 2007. The citations from SB 1 in this order refer to the code sections where the language will be found once effective.

In D.06-01-024, the Commission allowed qualifying solar projects to receive CSI incentives for up to five MW, an increase from the previous one MW limit in the Self-Generation Incentive Program (SGIP). (D.06-01-024, p. 14.) The language of SB 1 limits incentives to one MW projects. Parties agreed that the language of SB 1 reduced this MW limit for new solar incentive applications under the CSI. Thus, D.06-01-024 should be modified to clarify that although solar projects may be sized up to five MW, projects may receive incentives only up to the first MW, as had been the case under the SGIP.[5] This one MW limitation will commence with conditional reservations issued for solar incentives after January 1, 2007. The one MW cap does not apply to projects that received prior incentives under the SGIP or the CEC's Emerging Renewables Program. Prior incentive recipients may apply for up to one MW in incentives through CSI, as long as the application pertains to a new system.

IV. Eligibility Criteria

SB 1 mandates that by January 1, 2008, the CEC shall consult with the Commission, local publicly owned electric utilities, and the public to establish certain eligibility criteria for solar energy systems that will receive ratepayer funded incentives. (Public Resources Code Section 25782.) Until those criteria are established, SB 1 requires the Commission to determine which solar energy systems are eligible for incentives. (Public Utilities Code Section 2851(a)(1).)

These sections of SB 1, when taken together, require CEC-established eligibility criteria by January 1, 2008, but require the Commission to implement

[5] Under SGIP, the incentive limit has been applied per meter per year and we will apply that same standard to applications under CSI. Thus, customers with multiple meters can submit separate applications for projects associated with different meters.

the CSI program using the Commission's own eligibility criteria, until such time as CEC criteria are in place. The ALJ ruling proposed the Commission should continue its progress toward implementation of the CSI program on January 1, 2007, including CSI Handbook Development and program administration functions, using the eligibility criteria and guidance set forth in D.06-08-028, in advance of the CEC eligibility criteria required by SB 1.

Most parties agreed with this proposal. One party, the CFC, disagreed with this approach, stating that SB 1 requires the CEC to implement the CSI after January 1, 2008. According to CFC, the Commission can continue with its SGIP until the CEC begins its own CSI program in 2008. In addition, CFC contends the Commission can fund solar incentives through SGIP only after cost-effectiveness findings under Public Utilities Code Section 399.6.[6] The Joint Solar Parties respond that the budget limitations in Public Utilities Code Section 399.8(d) are not applicable because SB 1 sets detailed solar budgets.

We agree with the ALJ's proposal to continue CSI implementation toward a January 1, 2007 start date. As the CEC adopts eligibility criteria, in consultation with the Commission, the Commission can adapt the CSI program as needed to match any new criteria.

We disagree with CFC's interpretation that SB 1 prohibits the Commission proceeding with CSI in advance of CEC eligibility criteria. Section 2851(a)(1) of SB 1 explicitly requires the Commission to determine which systems are eligible for solar incentives in advance of CEC-adopted criteria. Furthermore, we

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[6] CFC has raised similar issues in an application for rehearing of D.06-08-028. That application is still pending before the Commission and we do not address it here.

disagree with CFC's interpretation that in 2007 the Commission can only provide incentives to solar through the SGIP. As of January 1, 2007, SB 1 states that "In implementing the *California Solar Initiative* the commission shall … authorize the award of monetary incentives …" (Section 2851(a)(1), emphasis added.) This language indicates that the program being implemented by the Commission under SB 1 is the CSI program and not SGIP. As already noted, in awarding monetary incentives under Section 2851(a)(1), this Commission is required to determine the eligibility of solar energy systems until the CEC establishes eligibility criteria for such incentives.

In addition, SB 1 does not direct the Commission to make cost-effectiveness findings before providing any solar incentives. While SB 1 states that "a solar initiative should be a cost-effective investment by ratepayers in peak electricity generation,"[7] this statement appears to be a program goal and is not a requirement that cost-effectiveness findings must precede incentives. As indicated in the April 25, 2006 Scoping Memo in this proceeding, the Commission intends to address a methodology for measuring the costs and benefits of distributed generation systems, including solar, in Phase II of this proceeding.

CFC is also incorrect in its argument that the CSI is subject to budgetary or policy constraints found in Public Utilities Code Sections 399.6[8] or 399.8. These sections govern funding unrelated to the Commission's implementation or

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[7] Public Resources Code Section 25780(b).

[8] Senate Bill 1250 repealed Public Utilities Code Section 399.6, effective September 27, 2006. (Sen. Bill No. 1250 (2005 – 2006 Reg. Sess.) §30.)

administration of the CSI program. Therefore, funding requirements that may appear in such sections are inapplicable to the Commission's implementation or administration of the CSI.

V. Incentive Reductions

SB 1 adds Section 2851(a)(1) to the Public Utilities Code and states that:

> The incentive level authorized by the commission shall decline each year following implementation of the California Solar Initiative, at a rate of no less than an average of 7 percent per year, and shall be zero as of December 31, 2016. The commission shall adopt and publish a schedule of declining incentive levels no less than 30 days in advance of the first decline in incentive levels. The commission may develop incentives based upon the output of electricity from the system, provided those incentives are consistent with the declining incentive levels of this paragraph and the incentives apply to only the first megawatt of electricity generated by the system.

In D.06-01-024, the Commission adopted and published a declining solar incentive schedule, with reductions in incentives at the earlier of MW levels of program participation or the start of each calendar year. The incentives declined in 10 steps, with incentives ending on December 31, 2016. Later, in D.06-08-028, the Commission modified its earlier incentive reduction schedule and adopted an incentive structure that declines only as MW levels of program participation are achieved, rather than after a specified period of time. Each of the incentive "step" reductions adopted by the Commission is larger than 7%. These reductions, however, are not necessarily linked to a calendar year.

The ALJ ruling asked parties to comment on whether the Commission's MW-based incentive reduction plan adopted in D.06-08-028 is now inconsistent with SB 1 and, if so, what changes should be made to the incentive reduction plan to bring it into compliance with SB 1. In addition, parties were asked to comment on whether SB 1 could be interpreted to allow the Commission to maintain a MW-based incentive reduction scheme, as long as incentives decline by an average 7 percent rate when assessed over a multiple-year period.

Comments from the solar industry (ASPv and the Joint Solar Parties), PG&E, and SDREO maintain the Commission should keep the MW based incentive reduction schedule it adopted in D.06-08-028. These parties generally contend that the language in SB 1 allowing "an average" incentive reduction signals the Commission should monitor incentive declines over the 10-year duration of CSI and adjust incentives as needed to meet the statute's requirements. They stress this approach will allow the CSI program the best chance of meeting the 3000 MW goal enunciated in SB 1.

A few parties suggest modifications to the incentive schedule adopted by the Commission in August 2006. SDG&E/SoCalGas suggest the Commission should return to the incentive reduction schedule adopted in D.06-01-024, which involves a MW based reduction or an annual decline, whichever is sooner. SDG&E/SoCalGas reason that this approach avoids premature exhaustion of funds. SCE suggests a variance on this to effectively manage incentives over time. Specifically, SCE proposes a 7% incentive decline if the MW triggers set in D.06-08-028 have not yet been reached. CARE suggests the Commission modify the incentive structure to provide a higher incentive level to systems under 30 kW, and allow these small systems to receive compensation for excess energy production through a power purchase agreement. SCE claims CARE's proposal is not allowed under the existing net energy metering statutes, which were not modified by SB 1.

We find the incentive reduction schedule adopted in D.06-08-028, which provides incentive reductions in steps larger than 7%, is consistent with the intent of SB 1 as long as we monitor incentive levels to ensure they decline no less than an average of 7 percent per year and incentives are zero as of December 31, 2016. In D.06-08-028, the Commission established a periodic review of CSI. We will use this periodic review to evaluate the average incentive reductions per year and make any appropriate adjustments to incentive levels to ensure the SB 1 requirements are met.

We established the current MW-based incentive reduction schedule after careful consideration of alternatives in D.06-08-028. Our reasoning there still applies, namely that incentive reductions based on volume are simple, transparent and predictable and correspond to the economics of the solar marketplace without resource intensive reviews. The schedule we adopted in D.06-08-028 can comply with SB 1 as long as we ensure the reductions achieve an average decline of no less than 7% per year, and incentives are zero as of December 31, 2016.

The modifications proposed by SCE and SDG&E/SoCalGas are aimed at managing funds over time. In our view, these modifications are unnecessary and could create confusion and less certainty in incentive levels, which are outcomes that parties specifically urged us to avoid. As we stated previously:

> It is unreasonable to assume that incentive levels in California can by themselves impact the market price for solar. We agree with several parties who have pointed out that solar labor and material costs are independent of Commission incentive levels and set to a significant degree by a worldwide market. If we reduce incentives each calendar year before target MW levels are achieved, we run the risk of the solar market stalling in California while solar panels and installers move to other more lucrative markets. It is more reasonable to link our incentive reductions to actual levels of demand. (D.06-08-028, p. 87.)

Therefore, we will not modify our previous incentive reduction schedule.

Further, SB 1 requires the Commission to "adopt and publish a schedule of declining incentive levels no less than 30 days in advance of the first decline in incentive levels." In D.06-08-028, we published a schedule of declining incentives for the entire 10-year duration of CSI, and required publication of real-time information on a public website of the total MWs in incentive applications so that interested persons can monitor pending incentive reductions. We find our adopted schedule complies with SB 1's requirements.

VI. Performance-Based Incentives

In D.06-08-028, the Commission adopted performance-based incentives (PBI) for systems of 100 kilowatts (kW) and larger, but does not move to PBI for systems of 30 kW and larger until 2010. SB 1 specifies that the Commission phase in PBI for systems under 100 kW on a faster schedule. Specifically, SB 1 adds Public Utilities Code Section 2851(a)(2), which provides that:

> The commission shall adopt a performance-based incentive program so that by January 1, 2008, 100 percent of incentives for solar energy systems of 100 kilowatts or greater and at least 50 percent of incentives for solar energy systems of 30 kilowatts or greater are earned based on the actual electrical output of the solar energy systems. The commission shall encourage, and may require, performance-based incentives for solar energy systems of less than 30 kilowatts. Performance-based incentives shall decline at a rate of no less than an average of 7 percent per year.

To conform to SB 1, the ALJ ruling proposed the following modifications to D.06-08-028 to phase in PBI more quickly:

Systems 100 kW and larger	PBI beginning January 1, 2007
Systems 50 kW and larger	PBI beginning January 1, 2008
Systems 30 kW and larger	PBI beginning January 1, 2010

In addition, the ALJ ruling proposed the Commission regularly assess whether this approach meets the targets of SB 1. For example, the Commission could review total incentive dollars committed or paid in 2008 to ensure that 50% of incentive funds are paid based on actual output, and make adjustments going forward as needed.

ASPv, the Joint Solar Parties, and SDG&E/SoCalGas agreed with the approach proposed in the ALJ ruling. The Joint Solar Parties support the approach because it focuses on total incentives paid and meets the practical needs of system owners discussed at length in D.06-08-028. SCE proposed an alternative approach wherein starting in 2008, the Commission would require program administrators to pay 50% of incentives to each project between 30 kW and 50 kW on a PBI basis.

We will adopt the PBI phase-in approach proposed in the ALJ ruling rather than the approach proposed by SCE because it is likely to be easier and less costly to administer. In addition, the Commission will annually assess the total incentive dollars committed or paid to ensure this approach meets the targets of SB 1, and make appropriate adjustments as needed. We will require quarterly reporting by the program administrators to the Director of the Energy Division on the percent of incentives committed or paid on a PBI basis. We decline to adopt SCE's approach because it would require program administrators to both monitor actual system output and make an up-front incentive payment to projects in the 30 kW to 50 kW size range. Administering two types of payments to these smaller projects could prove burdensome and costly, and we find it more efficient, and still in compliance with SB 1, to phase in PBI for systems above 30 kW as the solar industry adapts to sales and financing mechanisms associated with PBI over the next few years.

Both PG&E and SCE point out that the language of SB 1 does not allow any exemptions from the PBI requirement for solar installations on new construction projects. In D.06-08-028, the Commission had exempted new construction from PBI, allowing them to receive incentives on an up-front basis instead. We agree with PG&E and SCE that our decision must be modified to remove the PBI exemption for new construction, and so modify it by this order.

VII. Energy Efficiency

In D.06-01-024, the Commission required an energy efficiency audit for existing buildings as a condition of receiving CSI incentives, and directed staff to consider requiring energy efficiency improvements in existing buildings as a condition of solar incentive payments. In April 2006, the Energy Division's Staff Proposal recommended the Commission adhere to its earlier audit requirements and not require CSI incentive recipients to make energy efficiency improvements at this time. Staff suggested assessing experience with this approach and resulting energy efficiency improvements before requiring energy efficiency improvements in future years. In response, parties filed comments in May 2006 on whether the Commission should require efficiency improvements and the details of how energy audits should be handled as a precondition of receiving solar incentives.

Before the Commission could decide the issue of whether to require energy efficiency improvements, SB 1 was signed adding Section 2851(a)(2)(c)(3), which provides that:

> By January 1, 2008, the commission, in consultation with the State Energy Resources Conservation and Development Commission, shall require reasonable and cost-effective energy efficiency improvements in existing buildings as a condition of providing incentives for eligible solar energy systems, with

appropriate exemptions or limitations to accommodate the limited financial resources of low-income residential housing.

Given the language in SB 1 linking incentive payments to the requirement to make energy efficiency improvements, the Commission will need to work closely with the CEC to reflect these energy efficiency requirements in the CSI program as of January 2008. In the meantime, this decision clarifies the interim energy efficiency audit and efficiency standard requirements as a condition of receiving solar incentives in 2007, until reasonable and cost-effective energy efficiency improvements and exemptions for low-income residential housing are identified in consultation with the CEC, in compliance with SB 1.

Interim Audit Requirements

In April 2006, the Staff Proposal recommended maintaining the audit requirement for existing structures, with the clarification that an audit should both establish an efficiency baseline and educate the applicant regarding the economic benefits of efficiency improvements. Staff recommended simplifying the audit requirement by exempting any existing home or building already certified as energy efficient as demonstrated by the U.S. Green Building Council's Leadership in Energy & Environmental Design (LEED) designation or U.S. Department of Energy/U.S. Environmental Protection Agency "Energy Star" certification, as well as those having had an acceptable energy audit report during the past three years. In comments in May 2006, parties agreed with Staff's recommendations to allow exemptions from audits for structures recently certified as energy efficient.

Therefore, we find that applicants shall obtain energy efficiency audits for existing structures. These may be provided by any of the variety of methods offered by ratepayer-supported utility efficiency programs or from a non-utility provider. If a customer obtains an audit from a non-utility provider, this will be at the customer's expense. We adopt Staff's recommendations to exempt applicants from the audit requirement under any of the following circumstances:

- having an acceptable energy audit report during the past three years,
- proof of Title 24 energy efficiency compliance within the past three years, or
- having one of two national certifications of energy efficiency:
  - LEED or
  - Energy Star.

We find this interim audit requirement reasonably links efficiency and solar investments together, a view supported by virtually unanimous party comments.

Interim Audit Protocols, Documentation, and Certification

Next, we address what constitutes acceptable energy audit protocols, auditor certification, and documentation requirements. In April 2006, the Staff Proposal recommended that acceptable energy audits include online, telephone, or onsite audits offered through utility programs, and in the event such programs cannot accommodate all customers seeking solar incentives, non-utility audits as well. Staff asked parties to comment regarding what audit protocol and auditor certification should be accepted for non-utility audits. Further, Staff indicated that to ensure customer awareness of applicable energy-related improvements before making a decision on a solar facility, customers should be required to submit a copy of the audit results as part of the solar incentive application.

In comments in May 2006, SCE, SDG&E/SoCalGas and Division of Ratepayer Advocates indicate that the existing utility on-line and telephone audit protocols should be the standard for any non-utility providers. PG&E advocates that the audit should look at those measures now required by Title 24 standards, which typically apply to new construction or major building renovations. SCE further states that non-utility audit providers should be registered with the Commission. ASPv, presumably expecting non-utility audits would be used at additional expense to customers, recommended that additional solar rebates be given to cover such audit expenses, citing the example of a New Jersey program that does so.

In the case of residential audits, we accept the recommendation of several of the utilities to use the existing audit protocols for on-line or telephone audits. For non-residential structures, we are not sure if these simplified approaches are warranted, or if a more customized, site-specific approach is necessary. We also appreciate the recommendation from SDG&E/SoCalGas and SCE that non-utility audit providers should be subject to both a standard audit protocol, as well as certification they have appropriate training and knowledge. Thus, we direct the CSI Handbook development group to work with the program administrators to establish an appropriate non-residential energy audit protocol, and acceptable auditor/provider certification standards. The protocol should achieve a quality of audit commensurate with the utility programs. We do not adopt the suggestion that the Commission take the step of registering auditors. We expect there are existing state or national certification programs such as those used for Title 24 compliance, or from recognized educational institutions and professional and trade organizations that might be found suitable.

With regard to documentation requirements, we expect the application for existing structures to include a copy of findings from acceptable audit protocols, or evidence of meeting one of the exemption cases. For new construction, we believe Title 24 compliance documents are generally accepted proof of satisfying state building efficiency standards. We direct the CSI Handbook development group to identify acceptable compliance documentation and to include the recommended approach in the CSI program handbook.

VIII. Time Variant Pricing

In D.06-08-028, the Commission did not require CSI program participants to take service through time-of-use (TOU) tariffs to receive incentives. In contrast, SB 1 adds Section 2851(a)(4) which states that:

> Notwithstanding subdivision (g) of Section 2827, the commission shall require time-variant pricing for all ratepayers with a solar energy system. The commission shall develop a time-variant tariff that creates the maximum incentive for ratepayers to install solar energy systems so that the system's peak electricity production coincides with California's peak electricity demands and that assures that ratepayers receive due value for their contribution to the purchase of solar energy systems and customers with solar energy systems continue to have an incentive to use electricity efficiently. In developing the time-variant tariff, the commission may exclude customers participating in the tariff from the rate cap for residential customers for existing baseline quantities or usage by those customers of up to 130 percent of existing baseline quantities, as required by Section 80110 of the Water Code. Nothing in this paragraph authorizes the commission to require time-variant pricing for ratepayers without a solar energy system.

The ALJ ruling proposed that the Commission modify D.06-08-028 to require customers who apply for incentives starting January 1, 2007 to take service from the existing TOU tariff applicable to their situation. The ALJ ruling further proposed that solar energy systems that applied for and were approved to receive incentives prior to SB 1 taking effect on January 1, 2007, would not be required to retroactively sign up for service under a TOU tariff. Finally, any tariff design changes would be handled in each utility's general rate case.

Several parties agreed with the approach in the ALJ ruling, namely the Joint Solar Parties, PG&E and SCE. On the other hand, several parties, including ASPv, SDREO, and CARE, suggest the Commission should not implement the TOU requirements of SB 1 until it develops a new solar specific TOU tariff. ASPv and SDREO contend existing TOU tariffs do not provide the "maximum incentive" for solar investments as required by SB 1. ASPv and CARE urge the Commission to begin work on new solar TOU tariffs immediately, and not wait for future general rate cases. SDG&E notes it does not currently have a residential TOU rate that allows exclusions from baseline allowances and rate caps, as specified in SB 1. It suggests it could establish one by advice letter.

We find the approach in the ALJ ruling, which requires new CSI applicants as of January 1, 2007 to take service on applicable existing TOU tariffs, is reasonable and comports with the legislation. As SB 1 states, the purpose of the time variant pricing requirement is to create the maximum incentive for customers to install solar energy systems that coincide with California's peak electricity demand. Thus, we will only apply this requirement to new systems because it would have little impact on systems already installed.

Several parties request the Commission begin immediate work on solar specific TOU tariff refinements. We agree that refinements to the TOU tariffs to create the proper incentives for solar installations is a concept that deserves further exploration, but one that should be explored through an application rather than the advice letter process suggested by SDG&E. Thus, we agree with the proposal in the ALJ ruling that the Commission explore further TOU tariff enhancements or redesign in either the applicable utility's general rate case or other appropriate proceeding. Nevertheless, we note SDG&E's current TOU tariff, Schedule DR-TOU, contains a special condition which limits the tariff to the first 10,000 customers. SDG&E should file an advice letter to remove this limitation from the tariff.

Finally, PG&E asks for clarification that customers who applied for incentives before the end of 2006 but did not receive approval prior to January 1, 2007 would be required to take service under the applicable TOU tariff. In general, we clarify that projects that received a conditional reservation for solar incentives in 2006 shall follow the 2006 SGIP rules. Projects that receive a conditional reservation in 2007 shall follow the 2007 CSI program guidelines, including the TOU tariff requirements.

IX. Gas Utilities' Involvement in CSI

When the Commission established the CSI in D.06-01-024, it stated that the program would be funded through 2016 by charges on gas and electric distribution rates. Table 1 of D.06-01-024 delineates the annual revenue requirements collected by PG&E, SCE, SDG&E, and SoCalGas for the CSI program. In D.06-01-028, the Commission allocated program goals and budgets across these same gas and electric utilities.

SB 1 adds Section 2851(d)(1) which states that:

> The commission shall not impose any charge upon the consumption of natural gas, or upon natural gas ratepayers, to fund the California Solar Initiative.

Given the language in SB 1 prohibiting collections of program funds from natural gas ratepayers, the ALJ ruling proposed modifying D.06-01-024 and D.06-08-028 to revise the Commission's previously adopted revenue requirements, budget allocations, and MW goals for gas utilities.

Parties did not dispute this proposal and we adopt the changes proposed in the ALJ ruling to conform our earlier decision to the requirements of SB 1.

Essentially, the Commission now updates the CSI budget to remove the revenue requirements derived from gas utilities. However, if there are no collections from gas customers, then solar incentives will not be available to gas utility customers. Customers of combined investor-owned utilities (IOUs) who take gas service only from the IOU are not eligible for IOU funded CSI incentives, but may apply to their municipal electric utility for incentives. This, in turn, means the Commission now revises each utility's MW goals for solar installations.[9] Along the same lines, we remove SoCalGas as a program administrator since it will no longer collect funds for CSI from its ratepayers.

To enact these changes, this order modifies several tables previously adopted in D.06-01-024 and D.06-08-028. Specifically, Tables 1, 2 and 3 from D.06-01-024 are modified to revise the annual revenue requirements, CSI budgets, and administration and evaluation budgets to reflect collections and expenditures by electric utilities only.[10] These revised tables are contained in Appendix A of this decision.

A second issue we must address, given SB 1's language limiting collections from gas customers, is whether it is appropriate to provide rebates to customers who install solar devices that displace natural gas usage. The ALJ ruling raised the question about the extent to which the Commission should provide incentives for solar technologies other than PV, and whether the Commission should exclude from the incentive program those "non-PV" solar technologies

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[9] Changes to the MW goals for each utility are discussed in detail in Section X below.

[10] Changes to the budgets and revenue requirements for each utility are discussed in detail in Section X below.

that displace natural gas usage. By excluding gas displacing solar technologies, the Commission would avoid electric ratepayers cross-subsidizing natural gas savings.

In response to this query, the utilities, CARE, and CFC urge the Commission to not provide CSI solar incentives to technologies that displace natural gas. SCE contends SB 1 defines a solar energy system as one that provides for the "collection and distribution of solar energy for the generation of electricity." (Section 25780(e).) Further, SCE claims it is not equitable to make electric ratepayers fund natural gas savings. If the Commission chooses to provide incentives to solar heating and air conditioning or water heating, it should be limited to devices that displace electricity. PG&E, SDG&E/SoCalGas, and CARE suggest the Commission could fund solar technologies that displace gas through other means, such as the existing SGIP, research, development and demonstration, or energy efficiency programs.

In contrast, several parties, namely ASPv, CCSF, the Joint Solar Parties, SDREO and the Coalition, urge the Commission to consider providing incentives to solar thermal technologies, including those that displace natural gas. ASPv and the Coalition maintain that both electric and gas customers benefit from a program that decreases overall demand for natural gas for production of electricity. They claim that since SB 1 authorizes up to $100.8 million for solar thermal and solar water heating, the Commission should encourage the development of all solar thermal technologies. SDREO contends that encouraging reductions in natural gas usage enhances the environmental goals of SB 1 and could help hedge natural gas price volatility.

The issue of whether to provide incentives to non-PV technologies has been an open question for some time. In D.06-01-024, the Commission stated its intent that all solar technologies should qualify for incentives, including solar PV, solar thermal, solar water heating, solar heating and air conditioning, and concentrating solar technologies. (D.06-01-024, p. 13-14.) In that order, the Commission directed SDREO to draft and file a plan for a solar water heating pilot program in the SDG&E territory. At the same time, the Commission noted the need for further workshops and comments to obtain further information about the non-PV solar technologies before committing to provide incentives to them. (*Id.*)

In its April 2006 Staff Proposal, Staff recommended that the Commission provide incentives for several non-PV technologies and that those incentive levels should mirror the incentives provided to PV projects. However, Staff recommended that these incentive levels decline faster over the CSI program period than incentives for PV projects. In response to the April Staff Proposal, solar industry participants generally supported the concept of incentives to non-PV technologies, but asked the Commission to not attempt to predetermine a winning technology through unequal subsidies. Rather, the Commission should offer the same incentive to all solar technologies and "defer to the market" to determine the best solar technology. The utilities generally supported incentives to any non-PV technologies, but urge additional conditions and requirements to ensure incentives are justified and output is accurately metered. At the same time, the utilities urged regular review of all technologies and the need for continuing incentive support. The CFC contended CSI funds should not be diverted to non-PV technologies unless they are cost-effective, and suggested further pilots to determine cost effectiveness of new technologies before incentives are offered.

We find that given the SB 1's restrictions on collecting CSI funds from natural gas ratepayers, it would be inappropriate to use funds collected from electric ratepayers to subsidize natural gas savings. At the same time, SB 1 allows us to spend up to $100.8 million for incentives to solar thermal and solar water heating devices. Therefore, we will include solar thermal and solar water heating in our CSI incentive program, but only those solar thermal technologies that displace electric usage. SB 1 explicitly defines a "solar energy system" as a device that "has the primary purpose of providing for the collection and distribution of solar energy for the generation of electricity…." (Public Resources Code Section 24505.5(a)(3).) SB 1 states as a goal that CSI is an investment in peak electricity generation capacity. (Public Resources Code Section 25780 (b).) Further, in describing eligibility criteria, SB 1 requires that solar energy systems primarily offset part or all of the consumer's own electricity demand. (Public Resources Code Section 25782(a)(2).) Thus, SB 1's goals do not include natural gas displacement. We acknowledge the comments by numerous parties that there may be environmental benefits to natural gas savings, and indeed, we have noted this in our prior orders. Nevertheless, we find it inappropriate that electric ratepayers alone should bear the burden of contributing to the environmental and other benefits of natural gas conservation.

We will make one exception, that is, we will continue with the SDREO solar hot water heating pilot as set forth in D.06-01-024. SDREO has already submitted its plans for this pilot, and it is a very small expenditure of total CSI funds, namely less than $3 million.[11] The pilot should provide useful information on the economics of solar hot water heating.

PG&E, SCE and SDG&E/SoCalGas urge us to fund incentives to natural gas displacing solar technologies through our existing SGIP. We agree that encouraging reduction in natural gas consumption through solar technologies has environmental benefits and may help reduce natural gas price volatility. If we fund these technologies through SGIP, both electric and gas ratepayers support these incentives. We agree this is a reasonable approach and we herein direct the SGIP administrators to accept applications from solar thermal projects that displace natural gas usage in the portion of their programs that fund renewable technologies.[12] The SGIP program administrators should pay incentives to gas displacing solar projects at the same rate and under the same parameters as set forth for solar incentives in CSI. Among other things, this means projects should receive either PBI or Expected Performance Based Buydown (EPBB) incentives based on their size. Payments should be calculated by converting actual metered British Thermal Unit (BTU) output (for PBI), or estimated BTU output (for EPBB), into a kilowatt-hour (kWh) equivalent, where 3412 BTUs equals one kWh.[13]

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[11] SDREO filed a proposed pilot program on May 26, 2006. Comments on the proposal were filed in June and July 2006. The Commission is still reviewing the proposed plan and has not yet issued a ruling allowing the SDREO pilot to begin.

[12] Incentives to solar hot water heating will be handled through the SDREO pilot only, until further Commission order.

[13] Since one therm equals 10,000 BTU and one kWh equals 3412 BTUs, then one therm equals 2.93 kWh. Thus, when PV solar incentives in the CSI program are $.39 per kWh,

Footnote continued on next page

Next, we must address whether incentives to non-PV technologies shall be equal to PV incentives, or decline at a faster rate as Staff had proposed in April 2006. We shall adopt the same incentive levels for non-PV technologies as paid to PV projects, with the same rate of reduction as for PV projects, at least for now. This means that non-PV solar projects, whether gas displacing and funded through SGIP, or electric displacing and funded through CSI, shall be paid either PBI or upfront EPBB incentives, depending on their size as set forth in the schedule in Section VI of this order. All other rules from D.06-08-028 apply to project applications involving non-PV technologies, such as size limitations, metering, and energy efficiency audits. We note that the use of certain non-PV technologies could raise unique estimation, metering and measurement issues if the technology displaces electricity but does not produce it. The same is true for gas-displacing technologies. In comments on the Staff Proposal, parties suggested various approaches for addressing this issue, but the record lacks sufficient detail to direct a specific conversion approach for estimating or measuring electric or gas displacement. We direct the CSI program administrators to assign or hire technical experts to address the technical details of estimating non-PV output for EPBB incentives and metering and measuring electric displacement for PBI payments. The program administrators should file CSI Handbook revisions relating to these non-PV estimation, metering, and measurement guidelines no later than April 1, 2007, or as otherwise directed by the Assigned Commissioner or ALJ. The ALJ shall consult with the Assigned

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SGIP incentives for gas displacing solar technologies should pay $1.14 per therm ($.39 x 2.93).

Commissioner to review and approve these handbook revisions by ruling or Commission order, as deemed appropriate. Incentives for non-PV technologies will be available upon Commission ruling or order accepting these revisions.

We will avoid naming specific non-PV technologies that can apply for incentives. We see no need to limit participation to only technologies known at this time. As new solar non-PV technologies become viable, project proponents may apply for incentives as long as they meet other CSI eligibility criteria. Thus, there will be no percentage cap on participation of electric-displacing non-PV technologies, other than the $100.8 million limitation in SB 1 for solar thermal incentives.

The Commission will reassess incentives for non-PV technologies in its periodic CSI review, as set forth in D.06-08-028. There, the Commission may evaluate the participation of non-PV technologies in CSI and the need for incentives based on industry economics and market conditions.

CCSF requests clarification whether the restrictions in SB 1 affect rebates for solar projects by gas customers where those projects have already been submitted and approved. As we stated in Section VIII above, projects that applied for incentives and were conditionally approved under 2006 program rules are not impacted by the changes discussed in this order. Those projects should be completed and receive the rebates under the rules prior to SB 1 going into effect on January 1, 2007.

X. Total CSI Budget

SB 1 adds Section 2851(e)(1), which specifies that financial components of CSI shall consist of:

> Programs under the supervision of the commission funded by charges collected from customers of San Diego Gas and Electric

> Company, Southern California Edison Company, and Pacific Gas and Electric Company. The total cost over the duration of these programs shall not exceed two billion one hundred sixty-six million eight hundred thousand dollars ($2,166,800,000) and includes moneys collected directly into a tracking account for support of the California Solar Initiative and moneys collected into other accounts that are used to further the goals of the California Solar Initiative.

In D.06-01-024, the Commission adopted a CSI budget of $2.5 billion from 2007 through 2016. Later, in D.06-08-028, the Commission allocated this same budget across the utilities, including SoCalGas. Given the new CSI budget limit set by SB 1 and the prohibition on collections from gas ratepayers, the ALJ ruling proposed modifying D.06-01-024 and D.06-08-028 to reflect the Commission's new lower budget limit of $2.16 billion for 2007 through 2016 and to indicate corresponding reductions in MW goals for the Commission's portion of CSI. Moreover, the ALJ ruling proposed the Commission revise its allocation of the total dollars than can be disbursed in each step of the program. With the new budget limit of $2.16 billion in SB 1, the Commission may now spend only $1.7 billion in direct incentives, as opposed to the $2.1 billion set forth in Table 13 of D.06-08-028. The ALJ ruling proposed a revised budget for CSI, to conform to SB 1, as follows:

Table 1: Revised CSI Budget

Budget Category	($ in millions)
SB 1 CSI Budget	$2,166.80
Low Income Budget (10%)	216.68
Research Development and Demonstration (RD&D) Budget	50.00
SDREO Pilot Budget	3.00
Budget remaining	1897.12
Administration Budget	189.71[14]
Total CSI Budget for Direct Incentives	$1707.41

We will adopt the total CSI budget as set forth in the table above. Parties generally agreed with the budget table, and most parties asked for only minor clarifications. SCE commented that the administrative budget should be calculated as 10% of the total budget, rather than 10% of the budget after set-asides for low-income incentives, RD&D and the SDREO pilot, because there will be costs to administer low income solar incentives. We have added clarification that administrative costs for low-income incentives must be absorbed within the $216 million for low-income solar programs.

CFC contends that the $1.7 billion figure for direct incentives under CSI is too large because SB 1 requires the total CSI budget to be reduced by charges

[14] The administration budget of $189.71 is based on 10% of the budget for mainstream solar incentives, and does not include administrative costs for low income programs, RD&D, and the SDREO Pilot. Administrative costs for those programs shall be incorporated into their total budgets, which shall not exceed the figures in this table.

made to other accounts which further the same goals. According to CFC, the CSI budget must include incentives for energy efficiency. The Joint Solar Parties respond that there is no need to reduce the total CSI budget based on energy efficiency funding because energy efficiency programs are not based on the same goal as enumerated in SB 1, which is to "install solar energy systems." We agree with the Joint Solar Parties and thus, we do not reduce the total CSI incentive budget as CFC suggests.

Adjustments to MW Goals

In addition to clarifying the new lower CSI budget, the Commission should adjust its total MW goals to reflect that SB 1 has a total solar installation goal of 3000 MWs, which is the combined goal for solar programs by the Commission, CEC, and municipal utilities. The ALJ Ruling proposed adjusting the Commission's MW goal based on the Commission's pro rata share of the statewide CSI budget. The Commission's budget is now $2.16 billion, which is 65% of the total $3.35 billion specified in SB 1. Hence, the Commission's new solar MW goal should be 65% of 3000 MW, or 1940 MW. According to D.06-01-024, ten percent of program funds are reserved for solar incentives to low income residential and affordable housing projects. Thus, ninety percent of 1940 MW, or 1750 MW, are attributed to the mainstream incentive program.

Several parties agreed with the new lower MW goal and the revised tables to reflect these goals. We will adjust the tables in D.06-08-028 to reflect the new lower budget limit and the corresponding 1750 MW goal for the CPUC portion of CSI. The impacted tables for both D.06-01-024 and D.06-08-028 have been revised and are attached to this order in Appendices A and B.

SDGE/SoCalGas raise a concern with the allocation of budgets and MW goals across the three utilities. They note that while the budgets and MW goals for SCE and PG&E were reduced, SDG&E's CSI budget did not drop. As a result, SDG&E/SoCalGas claim that SDG&E's ratepayers would bear a greater proportion of program costs than ratepayers of the other electric utilities on a cents per kWh basis. To remedy this, SDG&E/SoCalGas propose an allocation of the total CSI budget based on each utility's share of total electric retail sales rather than gas and electric sales as was used previously in D.06-01-024. They argue this is appropriate because gas ratepayers are specifically prohibited from funding CSI. SCE and SDREO oppose this approach, and maintain the Commission should not change the method it uses to apportion the CSI budget. SCE notes the existing allocation is the same as the allocation of energy efficiency program budgets across the utilities.

We will adjust the allocation of the total CSI budget across the three utilities as SDG&E suggests, based on each utility's share of total electric sales. As a result, PG&E will be responsible for 43.7% of the CSI budget, SCE will bear 46%, and SDG&E will bear 10.3%.[15] We find this approach reasonable because the CSI program is now funded solely from the distribution rates of electric ratepayers and this adjustment makes each utility's budget equivalent on a dollars per kWh basis. The tables in Appendix A and B reflect these percentage adjustments.

PG&E requests the Commission revisit the allocation of MW goals between residential and nonresidential categories when the Commission reviews

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[15] SDG&E provided these percentages in its comments based on 2005 Federal Energy Regulatory Commission (FERC) Form 1 data. (SDG&E/SoCalGas, 9/25/06, p. 6, n. 1.) It amended the FERC Form 1 data in an amended filing on 9/28/06, but the amendment did not impact percentage allocated to each utility.

CSI in 2009. We agree that the allocation of program goals across the residential and nonresidential categories is one that we will review during periodic CSI assessments.

Other CSI Budget Issues

SCE contends that there are inadequate controls on the payout of incentives to ensure the CSI program remains below $2.166 billion. SCE requests the Commission place caps on PBI payments to avoid this problem. We will not revisit the PBI payment cap issue that we considered and rejected in D.06-08-028. As we stated in that order, we will not limit the incentives paid to any one project through PBI, although the program administrators must ensure they operate within their total budgeted CSI funds. (D.06-08-028, p. 33.)

SDG&E/SoCalGas request that D.06-08-028 be modified to allow it to establish a sub-account for PBI within its existing CSI balancing account. This request is reasonable and we will adopt it. We will modify Ordering Paragraph 7 of D.06-08-028 to make this change.

PG&E asks the Commission to clarify the SGIP budget for 2007. PG&E recommends authorizing the four utilities to continue their non-PV SGIP budgets and revenue requirements for 2007, with revenues collected from gas and electric customers as they are now. PG&E asks for clarity that PV incentives are now handled through CSI, while non-PV incentives are handled through SGIP.

We agree that we should clarify the SGIP budget for 2007, which will fund non-solar distributed generation projects and solar thermal displacing natural gas now that incentives for solar PV and electricity-displacing non-PV solar projects are handled through CSI. In D.01-03-073, the Commission adopted an SGIP budget of $125 million per year allocated across the four IOUs, with $42 million allocated to the solar portion of SGIP. Given that solar-electric incentives will be funded through CSI in 2007, the four IOUs should collect and spend $83 million ($125 million less $42 million) for their 2007 SGIP. The $83 million should be allocated across the four IOUs according to the percentages adopted in D.06-01-024, Table 2,[16] as follows:

Table 2: 2007 SGIP Budgets

IOU	Percentage	2007 SGIP Budget (in Millions)
PG&E	44%	$36
SCE	34%	28
SDG&E	13%	11
SoCalGas	9%	8
Total	**100%**	**$83.0**[17]

The IOUs should make the appropriate changes in their SGIP memorandum accounts to adjust for the lower 2007 SGIP budget, as shown in the table above.

A secondary budget issue involves allocation of unspent solar incentive funds from 2006. In D.05-12-044, the Commission authorized an additional $300 million for the 2006 SGIP program to fund solar incentives, in addition to the $42 million already allocated for solar incentives through SGIP. In D.06-08-028, we directed PG&E, SCE, SDG&E, and SoCalGas to transfer any unspent 2006 SGIP solar funds into their CSI balancing accounts on December 31, 2006. Now that we are allowing the utilities to fund gas-displacing solar

[16] These percentages are based on each utility's energy efficiency budget allocation.

[17] Each utility should spend no more than five percent of their total SGIP budget for administration.

technologies through SGIP, we modify this requirement and allow the four IOUs to carryover unspent 2006 SGIP solar funds into their 2007 SGIP renewable budgets.

XI. Handbook Revisions

The program modifications contained in this order will need to be reflected in the CSI Program Handbook. We will direct the CSI program administrators to draft necessary handbook revisions, except for revisions relating to non-PV incentives which have a later deadline, and send them to the Director of the Commission's Energy Division within 5 days of this order. Energy Division shall forward the changes to the ALJ, who will allow comment by all parties. The ALJ shall consult with the Assigned Commissioner to review and approve the final CSI Handbook through a ruling or Commission order, as deemed appropriate.

XII. Comments on Proposed Decision

The proposed decision of Commissioner Peevey was mailed in accordance with Public Utilities Code Section 311 and Rule 14.2(a) of the Rules of Practice and Procedure. Comments and/or replies were filed by ______________.

XIII. Assignment of Proceeding

President Michael R. Peevey is the Assigned Commissioner and Dorothy Duda is the assigned ALJ in this portion of the proceeding.

Findings of Fact

1. SB 1 directs the Commission and CEC to implement CSI given specific requirements and budget limits.
2. SB 1 allows the Commission to pay incentives up to the first MW of alternating current generated by solar energy systems.

3. SB 1 directs the CEC to establish eligibility criteria for solar incentives by January 2008, but until that time, it requires the Commission to determine which solar energy systems may receive incentives.

4. According to SB 1, solar incentive levels shall decline each year at a rate of no less than an average of 7 percent per year, and shall be zero as of December 31, 2016.

5. In D.06-08-028, the Commission adopted an incentive reduction schedule that declines as MW levels of program participation are achieved, and each step reduction is larger than 7 percent.

6. SB 1 directs a phase-in of performance-based incentives on a faster schedule than the Commission adopted in D.06-08-028.

7. Solar installations on new construction projects are not exempt from the performance-based incentive mandates in SB 1.

8. Effective January 2008, SB 1 directs the CEC to require energy efficiency improvements in existing buildings as a condition of receiving solar incentives.

9. SB 1 mandates time-variant pricing for all ratepayers with a solar energy system.

10. SDG&E's current residential TOU tariff is limited to the first 10,000 customers.

11. According to SB 1, the Commission may not impose charges on natural gas ratepayers to fund CSI.

12. SB 1's goals do not include natural gas displacement.

13. SB 1 contains a total solar installation goal of 3000 MWs, based on the solar programs of the Commission, CEC, and municipal utilities.

14. The Commission's authorized CSI funding is 65% of the total $3.35 billion authorized statewide.

15. The Commission's 65% share of the 3000 MW statewide goal is 1940 MW, and 1750 MW for the mainstream solar incentive program.

16. Allocating the CSI budget based on each utility's share of total electric sales makes each utility's CSI budget equivalent on a dollars per kWh basis.

Conclusions of Law

1. D.06-01-024 should be modified to state that commencing with conditional reservations for solar incentives after January 1, 2007, solar projects may be sized up to 5 MW, but may receive incentives only up to the first MW.

2. The Commission should continue CSI implementation as set forth in D.06 08-028, except as modified in this order, and adapt the CSI program to match CEC eligibility criteria once established.

3. The incentive reduction schedule adopted in D.06-08-028 is consistent with the intent of SB 1, as long as the Commission monitors and adjusts incentive levels to ensure they decline no less than an average of 7 percent per year and are zero by December 31, 2016.

4. To comply with SB 1, D.06-08-028 should be modified to apply performance-based incentives to systems 50 kW and larger beginning January 1, 2008, and to systems 30 kW and larger beginning January 1, 2010.

5. The Commission should monitor whether the total incentives committed or paid through PBI meet the directives of SB 1.

6. D.06-08-028 should be modified to delete any exemptions from PBI for new construction projects.

7. The interim energy efficiency requirements for solar projects set forth in this order should apply until the CEC identifies required energy efficiency improvements.

8. Until CEC requirements are established, an applicant for solar incentives relating to an existing structure shall obtain an energy efficiency audit, either from the utility or from a non-utility provider at the applicant's expense.

9. Applicants should be exempt from audit requirements if they had an audit during the past three years, can prove compliance with current Title 24 energy efficiency standards, or have an energy efficiency certification from LEED or Energy Star.

10. Residential energy efficiency audits performed by non-utility providers shall use existing utility audit protocols for on-line or telephone audits.

11. The CSI Handbook development group, as established by D.06-08-028, should establish a non-residential energy efficiency audit protocol and identify acceptable audit compliance documentation.

12. Applicants for solar incentives as of January 1, 2007 shall take service on applicable existing TOU tariffs.

13. The Commission should explore refinements to TOU tariffs in either the applicable utility's general rate case or other appropriate proceeding.

14. Solar energy systems that received a conditional reservation for solar incentives in 2006 shall follow the 2006 SGIP rules, and projects that receive a conditional reservation in 2007 shall follow the 2007 CSI program rules.

15. Tables 1, 2 and 3 of D. 06-01-024 should be modified as set forth in Appendix A to this order to remove the revenue requirements from gas utilities from the CSI budget.

16. Electric customers of PG&E, SCE, and SDG&E are eligible to receive incentives through the Commission's CSI program, but customers who take gas service only are not eligible and may apply to their publicly-owned electric utility for incentives.

17. SoCalGas should no longer serve as a CSI program administrator for applications after January 1, 2007, since it will no longer collect CSI funds from its ratepayers.

18. It is inappropriate to use electric ratepayer funds to subsidize natural gas savings.

19. Solar thermal and solar water heating technologies may receive CSI incentives only to the extent these technologies displace electric usage.

20. We should not prohibit gas displacing technologies from participating in the SDREO solar water heating pilot program, because it is a small pilot program designed to inform us of industry economics.

21. The Commission should fund gas-displacing solar thermal technologies through SGIP because both electric and gas ratepayers contribute to SGIP and because SB 1's goals do not include natural gas displacement.

22. The SGIP program administrators should pay incentives to gas-displacing solar projects under the same parameters and at the same kWh rate (after conversion of thermal output to kWh) as solar incentives in the CSI.

23. Non-PV solar projects should receive the same incentives, either PBI or EPBB, as paid to PV projects.

24. The CSI program administrators should assign or hire technical experts to address estimating, metering, and measuring non-PV solar output that displaces electricity but does not produce it.

25. The Commission should reassess incentives for non-PV solar technologies in its periodic CSI review proceeding.

26. The Commission should adopt the revised CSI budget as set forth in Table 1 of this order.

27. The tables in D.06-08-028 should be modified to reflect the Commission's revised solar MW goal of 1750 MWs for the mainstream solar incentive program and each utility's share of this revised MW goal.

28. Each utility's share of the CSI budget should be based on its share of total electric sales because the CSI program is now funded solely from the distribution rates of electric ratepayers.

29. The revenue requirements in D.06-01-024 should be modified based on total electric sales so that each utility bears the following percentage of the total budget: PG&E 43.7%, SCE 46%, and SDG&E 10.3%.

30. D.06-08-028 should be modified to allow the utilities to establish a sub-account for PBI within their existing CSI balancing accounts.

31. The 2007 SGIP budget should be $83 million, allocated across the four IOUs according to Table 2 in this order.

32. PG&E, SCE, SDG&E, and SoCalGas should transfer any unspent 2006 SGIP solar funds into their 2007 SGIP renewable budgets.

O R D E R

IT IS ORDERED that:

1. Decision (D.) 06-01-024 is modified as set forth in Appendix A of this order.

2. D.06-08-028 is modified as set forth in Appendix B of this order.

3. The California Solar Initiative (CSI) program modifications relating to incentive limits, the phase in of performance-based incentives, energy efficiency requirements, time variant pricing requirements, incentives to non-photovoltaic solar projects, gas utility involvement in CSI, and the total CSI budget are adopted as set forth in this order.

4. Effective January 1, 2007, Southern California Gas Company (SoCalGas) shall no longer collect funds from its ratepayers for CSI and shall cease all CSI program administration responsibilities for new solar incentive applications received after January 1, 2007. SoCalGas shall continue its administrative duties for solar incentive applications received prior to January 1, 2007.

5. Within 5 days of the effective date of this order, the CSI program administrators shall provide to the Director of the Energy Division draft CSI Program Handbook revisions that are necessary to reflect all program modifications contained in this order, except those relating to non-PV solar projects. Energy Division shall forward these draft Handbook revisions to the Administrative Law Judge for comment by all parties and final Handbook approval as set forth in this order.

6. The CSI program administrators shall coordinate to assign or hire technical experts to address estimation, measurement and metering of non-PV solar projects. The program administrators shall file handbook revisions relating to non-PV incentives no later than April 1, 2007, unless otherwise directed by the Assigned Commissioner or Administrative Law Judge (ALJ) for review and approval by the Assigned Commissioner and ALJ in a ruling or Commission order, as deemed appropriate. Incentives for non-PV technologies will be available upon Commission ruling or order accepting these revisions.

7. The Self-Generation Incentive Program (SGIP) program administrators may pay incentives to gas-displacing solar technologies as set forth in this order.

8. No later than July 1, 2008, and quarterly thereafter until January 1, 2010, the CSI program administrators shall send a letter to the Director of the Commission's Energy Division reporting the percent of total solar incentives committed or paid on a performance basis for systems of 30 kilowatts or greater.

9. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company (SDG&E), and Southern California Gas Company shall adjust their SGIP memorandum accounts to reflect the 2007 SGIP budget adopted in this order, and shall carryover any unspent 2006 SGIP solar funds into their 2007 SGIP renewable budgets.

10. Within 30 days from the effective date of this order, SDG&E shall file an advice letter to amend Schedule DR-TOU as set forth in this order.

11. This proceeding shall remain open for consideration of additional implementation issues in Phase II.

This order is effective today.

Dated ____________________________, at San Francisco, California.

Appendix A

Modifications to D.06-01-024

Decision 06-01-024 should be modified as follows (additions in underline):

Conclusions of Law

3. The CSI should offer incentives to any solar technology with a capacity rating of less than 5 MW, but as of January 1, 2007, projects may receive incentives only up to the first MW. Solar water heating incentives should be provided only as part of a closely monitored pilot program as set forth herein.

Table 1: IOU Annual Revenue Requirements for CPUC Portion of CSI

(In millions of dollars)

Year	PG&E	SCE	SDG&E	SoCalGas	Total
2007	$140	$147	$33	$0	$320
2008	$140	$147	$33	$0	$320
2009	$140	$147	$33	$0	$320
2010	$105	$110	$25	$0	$240
2011	$105	$110	$25	$0	$240
2012	$105	$110	$25	$0	$240
2013	$70	$74	$16	$0	$160
2014	$70	$74	$16	$0	$160
2015	$70	$74	$16	$0	$160
2016	$2	$2	$1	$0	$5
Total	**$946**	**$996**	**$223**	**$0**	**$2,165**

Table 2: IOU Share of CSI Costs

	% Total budget	Budget (in millions)
PG&E	43.7%	$946
SCE	46.0%	$996
SDG&E	10.3%	$223
Total	100%	$2,165

Table 3: Administrative and Evaluation Budgets by Utility Territory[18]

Utility	Administrative Budget
PG&E	$83
SCE	$87.2
SDG&E	$19.5
Total	**$189.7**

(END OF APPENDIX A)

[18] The administrative budget is calculated as 10% of the CPUC overall CSI budget net of the budgets for low-income incentives ($216.68 million), Research Development and Demonstration ($50 million), and the SDREO Pilot ($3 million). Thus, the total administrative budget equals 10% of $1,897 billion, or $189.7 million. The administrative budget includes funding for evaluation, marketing and outreach, and general administrative functions.

Appendix B

Modifications to D.06-08-028

Decision 06-08-028 should be modified as follows (additions in underline):

Conclusions of Law

8. We should transition smaller systems, larger than 50 kW, to a PBI structure in 2008, and larger than 30 kW, to PBI structure in 2010, after we have experience with PBI and to allow sales and financing arrangements to evolve.

Conclusion of Law 11 should be deleted.

Ordering Paragraphs

1. Delete reference to "Southern California Gas Company."

4. Beginning January 1, 2007, the Commission will apply a PBI structure to all systems 100 kilowatts (kW) and larger. Beginning January 1, 2008, the Commission will apply a PBI structure to all systems 50 kW and larger, and beginning January 1, 2010, to any system 30 kW and larger. Any system, regardless of size, may opt for the PBI payment structure in Table

5. The Commission will require all building-integrated photo-voltaic (PV) systems, including those on new construction, to receive incentives through a PBI structure. (Delete the last phrase "but will not require other new construction solar installations to be paid through PBI.")

6. Delete reference to "SoCalGas."

7. PG&E, SCE, and SDG&E (delete "and SoCalGas") shall each file an advice letter to establish an interest-earning PB1 balancing account and amend the preliminary statement of their tariffs to describe the PB1 balancing account and PBI program description and payment criteria. The utilities may create the PBI balancing account as a sub-account of their CSI balancing accounts. On a quarterly basis, each utility shall forecast the total five years expected PBI payment amount for all solar projects completed in that quarter, and deposit that amount into its balancing account to ensure fund security over the five-year payment period.

Table 2

CSI MW Targets by Utility and Customer Class

		PG&E (MW)		SCE (MW)		SDG&E (MW)	
Step	MW in Step	Res	Non-Res	Res	Non-Res	Res	Non-Res
1	50	--	--	--	--	--	--
2	70	10.1	20.5	10.6	21.6	2.4	4.8
3	100	14.4	29.3	15.2	30.8	3.4	6.9
4	130	18.7	38.1	19.7	40.1	4.4	9.0
5	160	23.1	46.8	24.3	49.3	5.4	11.0
6	190	27.4	55.6	28.8	58.6	6.5	13.1
7	215	31.0	62.9	32.6	66.3	7.3	14.8
8	250	36.1	73.2	38.0	77.1	8.5	17.3
9	285	41.1	83.4	43.3	87.8	9.7	19.7
10	350	50.5	102.5	53.1	107.9	11.9	24.2
Totals		764.8		805.0		180.3	
Percent		43.7%		46.0%		10.3%	

Table 3

Incentive Levels by MW Step ($/watt)

Step	MW in Step	Gov't/ Non-Profit	Res	Commercial
1	50	$2.80	$2.80	$2.80
2	70	$3.25	$2.50	$2.50
3	100	$2.95	$2.20	$2.20
4	130	$2.65	$1.90	$1.90
5	160	$2.30	$1.55	$1.55
6	190	$1.85	$1.10	$1.10
7	215	$1.40	$0.65	$0.65
8	250	$1.10	$0.35	$0.35
9	285	$0.90	$0.25	$0.25
10	350	$0.70	$0.20	$0.20

Table 5
Levelized PBI Monthly Payment Amounts at 8% Discount Rate

MW Step	MW in step	PBI payments (per kWh)		
		Residential	Commercial	Government Non-Profit
1	50	n/a	n/a	n/a
2	70	$0.39	$0.39	$0.50
3	100	$0.34	$0.34	$0.46
4	130	$0.26	$0.26	$0.37
5	160	$0.22	$0.22	$0.32
6	190	$0.15	$0.15	$0.26
7	215	$0.09	$0.09	$0.19
8	250	$0.05	$0.05	$0.15
9	285	$0.03	$0.03	$0.12
10	350	$0.03	$0.03	$0.10

Table 6
Maximum EPPB Payment Amounts

		EPBB payments (per watt)		
MW Step	**MW per step**	**Residential**	**Commercial**	**Government/ Non-Profit**
1	50	n/a	n/a	n/a
2	70	$2.50	$2.50	$3.25
3	100	$2.20	$2.20	$2.95
4	130	$1.90	$1.90	$2.65
5	160	$1.55	$1.55	$2.30
6	190	$1.10	$1.10	$1.85
7	215	$0.65	$0.65	$1.40
8	250	$0.35	$0.35	$1.10
9	285	$0.25	$0.25	$0.90
10	350	$0.20	$0.20	$0.70

Table 10

MW Allocations by Utility

Incentive Step	MWs in Step	PG&E	SCE	SDG&E
1	50	n/a	n/a	n/a
2	70	30.6	32.2	7.2
3	100	43.7	46.0	10.3
4	130	56.8	59.8	13.4
5	160	69.9	73.6	16.5
6	190	83.0	87.4	19.6
7	215	94.0	98.9	22.1
8	250	109.3	115.0	25.8
9	285	124.5	131.1	29.4
10	350	153.0	161.0	36.1
Total	1750	764.8	805.0	180.3
	Percent	43.7%	46.0%	10.3%

Table 11

CSI MW Targets by Utility and Customer Class

		PG&E (MW)		SCE (MW)		SDG&E (MW)	
Step	MW in Step	Res	Non-Res	Res	Non-Res	Res	Non-Res
1	50	--	--	--	--	--	--
2	70	10.1	20.5	10.6	21.6	2.4	4.8
3	100	14.4	29.3	15.2	30.8	3.4	6.9
4	130	18.7	38.1	19.7	40.1	4.4	9.0
5	160	23.1	46.8	24.3	49.3	5.4	11.0
6	190	27.4	55.6	28.8	58.6	6.5	13.1
7	215	31.0	62.9	32.6	66.3	7.3	14.8
8	250	36.1	73.2	38.0	77.1	8.5	17.3
9	285	41.1	83.4	43.3	87.8	9.7	19.7
10	350	50.5	102.5	53.1	107.9	11.9	24.2
Totals		764.8		805.0		180.3	
Percent		43.7%		46.0%		10.3%	

Table 12

CSI MW Allocations by Customer Sector

Customer Sector	**MW**	**Percent**
Residential MW	577.5	33%
Non-Residential MW	1172.5	67%
2006 SGIP Program	50	
Total MW	1800	100%

Table 13

CSI Incentive Levels by Incentive and Customer Class

Step	MW in Step	Gov't/ Non-Profit	Res	Commercial	Total $ Disbursed in Step ($ in millions)
1	50	n/a	n/a	n/a	n/a
2	70	$3.25	$2.50	$2.50	$186
3	100	$2.95	$2.20	$2.20	$235
4	130	$2.65	$1.90	$1.90	$267
5	160	$2.30	$1.55	$1.55	$272
6	190	$1.85	$1.10	$1.10	$237
7	215	$1.40	$0.65	$0.65	$172
8	250	$1.10	$0.35	$0.35	$125
9	285	$0.90	$0.25	$0.25	$108
10	350	$0.70	$0.20	$0.20	$105
				Total	$1,707

(END OF APPENDIX B)

INFORMATION REGARDING SERVICE

I have provided notification of filing to the electronic mail addresses on the attached service list.

Upon confirmation of this document's acceptance for filing, I will cause a Notice of Availability to be served upon the service list to this proceeding by U.S. mail. The service list I will use to serve the Notice of Availability is current as of today's date.

Dated November 14, 2006, at San Francisco, California.

/s/ ELVIRA NIZ

Elvira Niz

************** SERVICE LIST *************
Last Update on 14-NOV-2006 by: LIL
R0603004 LIST

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